## Hazard Review and Work Authorization for Use of the Small generators

#### **Purpose**

This Meteorology and Air Quality Group (MAQ) hazard review (HR) describes the safe operation of the small-engine-powered generators owned by MAQ.

#### Scope

This HR applies to the use of the group-owned small-engine-powered generators used to power environmental samplers or to provide power for special studies.

# History of revision

This table lists the revision history and effective dates of this Hazard Review.

Revision	Date	Description Of Changes
0	11/07/00	New document, issued as HCP.
1	11/19/01	
2	11/21/02	
3	11/14/05	Revised from HCP format to HR.

#### **Signatures**

Prepared by:	Date:	Approved by:	Date:
Jake Martinez, MAQ	<u>11/09/05</u>	Craig Eberhart, Environmental Air Monitoring Project	<u>11/09/05</u>
Approved by:	Date:	Work authorized by:	Date:
Terry Morgan, QA Officer	<u>11/09/05</u>	Dianne Wilburn, MAQ Acting Group Leader	<u>11/09/05</u>

11/17/05

#### **CONTROLLED DOCUMENT**

## **Activity Description/Overview**

Work tasks/Steps	Hazards, Concerns, and Potential accidents; Likelihood/ Severity  Controls, Preventive Measures (e.g., safety equipment, administrative controls, etc.)		Hazard Level from IMP 300-00-00 Hazard Grading Matrix
Move and transport the generator.	Back injuries from lifting or moving.  occasional / critical = medium	Always use two people to move and load the generator. Use proper lifting techniques.	Low
Start generator according to manufacturer's instructions in owners manual.	None.	None.	Low
Operate generator according to manufacturer's instructions in owners manual. Plug in power cords.	Electrical shocks improbable / moderate = minimal	Use GFCI cord at generator end if generator is not so equipped. Ensure cords are unplugged before starting generator. Ensure the breaker at the generator is OFF before plugging in any electrical cords; then turn on breaker to energize the cord.	Low
Work near running generator.	Inhalation of exhaust gases can cause respiratory harm.  Improbable / critical = low	Stay upwind, avoid the smell of exhaust fumes.	Low

Work tasks/Steps	Hazards, Concerns, and Potential accidents; Likelihood/ Severity	Controls, Preventive Measures (e.g., safety equipment, administrative controls, etc.)	Hazard Level from IMP 300-00-00 Hazard Grading Matrix
Refuel engine when needed.	Fuel spills, fires. Fuel can be spilled on the hot engine and start a fire. Storage and transportation of fuel creates risks of spillage.  Occasional / critical = medium	When refueling: Only do refueling OUTDOORS and AFTER the engine has cooled for at least 5 minutes. Carry gas in approved safety gas cans only MAXIMUM 8 gallons. Wear safety glasses when refueling. Check engine oil at each refueling. Leave MAX of 17 oz in engine fuel tank.  When filling gas cans: Always put the can ON THE GROUND when adding gas. Cans in the bed of a truck, especially one with a bed liner, are often not grounded and a spark can occur between the gas nozzle and the can. Many fires have occurred this way.	Low

#### **Prerequisites**

In addition to training to this HR, the following training is required before performing work in this HR:

• Read manufacturer's manual

Wastes or residual materials resulting from process

None.

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**Emergency** in event of control failure

For all injuries, provide first aid and see that injured person is taken to Occupational Medicine (only if immediate actions to take medical attention is not required) or the hospital. Notify supervisor and group office as soon as possible.

### Click here to record "self-study" training to this HR.

NOTE: Training to this document, as recorded in the EDS system, constitutes authorization to perform the work.